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July 25, 1989

Robert E. Layton, 6A
Regional Administrator
Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202

Dear Mr. Layton:

This is a complaint referral regarding reports of damaged pit liners in the solar ponds and also possible uncapped water wells underneath these waste water ponds, at a major chemical facility, DynaGen - a subsidiary of the General Tire and Rubber Company, in Odessa. Reportedly, these problems may have existed since the late 1970's.

In the 1970's, DynaGen constructed six solar evaporation ponds for treatment of waste water effluent from the daily plant production of styrene-butadiene synthetic crumb rubber. Prior to the construction of the solar ponds, the former plant manager, the late P. J. Wallace, raised cattle on this acreage with the assistance of Mr. Arby Miller and Mr. Earnest Husband, who were originally cow hands working that acreage and are currently two of the three chief safety-officers in the plant. Mr. Keith Pearson was the Safety-Environmental Manager for the facility, but has just been transferred.

The presence of old water wells on this acreage is well known by present and past plant employees. There are probably also county or city records that document the water wells and their location.

Solid allegations have been reported that the DynaGen solar ponds (six of them) may have significant damage to the plastic pit liner, which is to the point that they can not hold water levels anymore. Furthermore, gravel and large rocks have reportedly been put down and into the solar ponds below water level in order to hold the liner down in place.

Winds reportedly have also gotten underneath the liner on several occasions, and have left a lot of bubbles on the bottom and this may have put pressure to

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EP-6W-S
REGION VI

DynaGen Inc
TXD0574226851

SUPERFUND FILE

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float the liner, thus requiring contractors to bring in a large load of rocks. The rocks may also be used to cover the deteriorating plastic around the exposed upper edges of the liner.

It may be relatively easy to inspect the rock-covered edges of the plastic liner for signs of damage and deterioration. Mr. Earnest Husband and management have allegedly supervised the repair work. Damage and deterioration of the plastic liner has reportedly occurred to at least several of the larger solar ponds.

It has been reported that, in the past, one employee actually met with a local Odessa attorney, approximately ten years ago to consider bringing formal charges against company management, regarding the ground water contamination problem from the solar ponds and also the damaged plastic liner. Since there were not sufficient in-plant witnesses willing to support the allegations, the case was not pursued any further.

One reason that the plastic liner may have become damaged is due to low water levels on several occasions and the sun baked the plastic liner, to the point that the several of the ponds will not hold constant water levels without a constant in-put. It would be interesting to talk to the maintainer operators who actually spread the gravel (to cover the damage) for the local contractor, which is the Jones Brothers Paving Contractors in Odessa. The Jones Brothers firm has been hauling loads of gravel and rock into the solar ponds area, reportedly for at least ten years.

In the 1970's, it was reported that there were at least four water wells on the previous grazing acreage, perhaps left uncapped during the construction phase of the solar ponds, and a concern was expressed for ground water contamination if they were uncapped. The Texas Water Commission apparently has no current records to support the existence of prior wells.

Ground water contamination problems do exist downstream in the water table from the Odessa Petrochemical Complex, in which the DynaGen Facility is located. This information recently came out in a recent litigation and a lawsuit by private citizens, with contaminated water wells, against the City of Odessa Waste Water Treatment plant, also located next to the Complex.

Large scale amounts of hydrocarbon liquids, containing 95% benzene and the rest benzene-derivatives, were reported by another facility in the Complex, next to DynaGen. Tests indicated that as much as 500,000 gallons of hydrocarbon liquids are present underneath this neighboring facility, and plans are in progress to recover much of this liquid in 1989-90.

Another DynaGen employee, within the past two years, has reportedly made a complaint with the Texas Water Commission, but reportedly there was no official response or investigation of the solar ponds at that time.

Several individuals are currently interested in providing pertinent information and statements concerning the potential problems with these solar waste water evaporative ponds, but are interested in discussing the problems only with federal officials.

X-1000

The Texas Air Control Board regional office has recently issued a series of nuisance violations, as a result of odorous emissions from decaying organic matter in the ponds. DynaGen has indicated to the Texas Air Control Board that it intends to have a Houston-based contractor conduct a dredging operation in the ponds in August, and the complainant individuals are concerned that the reported problem of the damaged liner might be further covered-up.

If you have any questions regarding this information, please feel free to contact me at 915/367-3871.

Sincerely,

Neil J. Carman

Neil J. Carman, PhD
Staff Services Officer
Air Quality Control Region VI
1901 E. 37th, Suite 101
Odessa, Texas 79762

cc: Myron O. Knudson, 6W, Division Director, Water Management



ODESSA
REGIONAL OFFICE

1901 EAST 37TH STREET, SUITE 101
ODESSA, TEXAS 79762

For your information:

7/5/89

JEP:

I THOUGHT YOU MIGHT WISH
TO LOOK AT THIS LIST. IT IS FROM
DYNAGEN, ALTHOUGH YEARS OLD.
THE ONLY THING DIFFERENT IS
TOTAL AMOUNT OF WASTE IS NOW
ABOUT 963.6 TONS/YR AS SHOWN IN
NEW CONTINUANCE PERMIT, 1989.

TXD0574226851

Please call if you have any questions.

Telephone: 915/367-3871

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MATERIAL BALANCE

| Description | Raw Material Charged To | | | | Waste |
|----------------------------------|-------------------------|--------------------|-----------------------|----------------------|----------------|
| | Plant lbs/yr. | Product lbs/yr. | Incinerator lbs/yr | Atmosphere lbs/yr | Water lbs/y |
| Styrene | 26,656,032 | 26,240,198 | 179,340 | 236,494 | -0- |
| Butadiene | 85,969,297 | 84,765,727 | 601,460 | 602,110 | -0- |
| Extender Oil | 31,642,699 | 31,440,600 | 155,652 | 46,447 | -0- |
| Carbon Black | 20,084,850 | 19,601,502 | 110,310 | -0- | 373,03 |
| Antioxidant | 1,118,014 | 829,582 | 88,441 | -0- | 199,99 |
| Glue | 131,795 | 120,785 | 929 | -0- | 10,08 |
| Rosin Acid Soap | 4,108,082 | 3,870,000 | 37,457 | -0- | 200,62 |
| Fatty Acid Soap | 3,316,108 | 3,116,000 | 1,392 | -0- | 198,71 |
| Mixed Fatty Acid | 1,301,624 | 1,143,000 | 31,000 | -0- | 127,62 |
| C ₁₈ H ₃₇ | 197,632 | -0- | -0- | -0- | 197,62 |
| Activator Solution | 432,994 | -0- | -0- | -0- | 432,99 |
| Catalyst | 166,975 | 165,804 | 1,171 | -0- | -0- |
| Modifier | 261,110 | 259,270 | 1,840 | -0- | -0- |
| Short Stop | 279,556 | 277,586 | 1,970 | -0- | -0- |
| H ₂ SO ₄ | 1,572,542 | -0- | -0- | -0- | 1,572,54 |
| NaOH | 325,788 | -0- | -0- | -0- | 325,78 |
| KCL | 145,723 | -0- | -0- | -0- | 145,72 |
| KOH | 2,099,561 | -0- | -0- | -0- | 2,099,56 |
| NAFA | 31,950 | 31,000 | 950 | -0- | -0- |
| TSP | 224,295 | -0- | -0- | -0- | 224,29 |
| TBE | 7,153 | -0- | 7,153 | -0- | -0- |
| Colloid 982G | 7,222 | -0- | -0- | -0- | 7,22 |
| NPH(Nitroso Phenylamine Hydroxy) | 3,573 | 2,880 | 693 | -0- | -0- |
| Ammonia | 551 | -0- | -0- | -0- | 55 |
| AO 535 (Phenolie) | 843 | 601 | 242 | -0- | -0- |
| Nalco 107 (Organic Amine) | 397,113 | 36,000 | -0- | -0- | 361,11 |
| Alum | 2,143,719 | -0- | -0- | -0- | 2,143,71 |
| West Vaco #95 | 220 | 220 | -0- | -0- | -0- |
| Rubber Product (85,950 lbs.) | | 171,900,755 | | 885,051 | 8,621,21 |
| Scrapp to Incinerator | | | 1,220,000 | | |
| | 182,627,021 | | | | |

NOTE: Balance does not include 85,950 lbs. H₂O contained in product rubber

RAW MATERIAL DESCRIPTION

| <u>Description</u> | <u>Raw Material Charged to Plant</u> |
|--|--|
| <u>Department 941 - Latex</u> | 163 / 4 r |
| <u>Soap Solution</u> | |
| Rosin Acid Soap | 4,108,082 |
| TSP (Tri Sodium Phosphate) | 224,295 |
| Daxad | 197,632 |
| NaOH | 177,090 |
| Fatty Acid (Stearic) | 3,316,108 |
| KOH | 2,099,561 |
| KCL | 145,723 |
| Nilox F-88 (Mixed Fatty-Rosin Acid) | 1,301,624 |
| NAFA | 31,950 |
| <u>Activator Solution</u> | |
| EDTA (Versene) | 278,815 |
| Copperas | 40,151 |
| TPP (Tri Potassium Phosphate) | 1,865 |
| SFS (Sodium Formaldehyde Sulfoxylate) | 109,063 |
| Ethylene Diamine Tetra Acetic Acid | 3,100 |
| <u>Catalyst</u> | |
| PMHP (Paramethane Hydroperoxide) | 166,975 |
| <u>Modifier</u> | |
| Sulfole (Tertiary Dodecyl Mercaptan) | 261,110 |
| <u>Shortstops</u> | |
| SDDC (Sodium Dimethyl Dithiocarbamate) | 161,309 |
| Sodium Polysulfide | 25,825 |
| Polyamine H (Ethylene Diamine) | 14,603 |
| Sodium Nitrite | 51,632 |
| DEHA (Diethylhydroxylamine) | 26,187 |
| <u>Misc. Latex Chemicals</u> | |
| TBC (Tertiary Butyl Catechol) | 7,153 |
| Colloid 982G (Latex Defoamer) | 7,222 |
| Nitroso Phenyl Hydroxylamine | 3,573 |
| Aqua Ammonia | 551 |
| AO 535 (Phenolic) | 843 |
| <u>Department 942 - Coagulation</u> | |
| <u>Antioxidants - Staining</u> | |
| Dresinate Tx (Tall Oil) | 32,059 |
| BLE (Diphenyl Amine) | 172,929 |
| Flexzone 7L (DMB-AOZ) | 313,723 |

Raw Material Description, Cont'd

Antioxidants - Non-Staining

| | |
|--|---------|
| Polygard (Tris Nonyl Phenyl Phosphite) | 534,423 |
| Flexon 680 (Oil Type ASTM 103) | 64,880 |

Extender Oil - Staining

| | |
|-----------------------|------------|
| ASTM - Type 101 | 29,090,781 |
| Tall Oil - Fatty Acid | 770,066 |

Extender Oil - Non-Staining

| | |
|-------------------------|-----------|
| NAPH - ASTM - Type 103 | 1,520,361 |
| NAPH - ASTM - Type 104A | 261,491 |

Miscellaneous - Coagulation

| | |
|-------------------|-----------|
| NaOH | 148,698 |
| Sulfuric Acid | 1,572,542 |
| Alum | 2,143,719 |
| Glue | 131,795 |
| Nalco 107 (Amine) | 397,113 |
| Westvaco | 220 |

Department 944 - Carbon Black

| | |
|-----------|------------|
| ISAF | 2,922,188 |
| N-550 | 470,620 |
| ISAF - HS | 2,563,001 |
| SAF - HS | 181,240 |
| N-339 | 12,697,981 |
| N-234 | 90,580 |
| N-351 | 1,159,240 |